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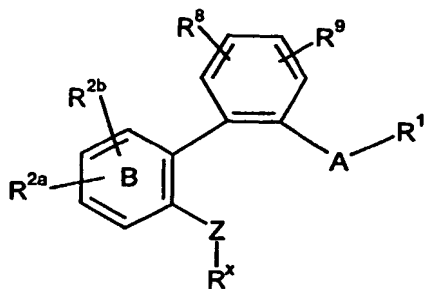
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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: PHENYL COMPOUNDS



(I)

(57) Abstract: Compounds of formula (I) or derivatives thereof: wherein A, B, Z, R<sup>1</sup>, R<sup>2a</sup>, R<sup>2b</sup>, R<sup>x</sup>, R<sup>8</sup>, and R<sup>9</sup> are as defined in the specification, a process for the preparation of such compounds, pharmaceutical compositions comprising such compounds and the use of such compounds in medicine.

# INTERNATIONAL SEARCH REPORT

PCT/EPC/8/12181

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07C63/331 C07C63/33 C07C233/54 C07C311/08 C07C229/64  
C07C69/76 C07C235/42 C07D257/06 C07C311/51 C07D213/30  
C07D213/79 A61K31/192 A61K31/196 A61K31/235 A61K31/166

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07C C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

CHEM ABS Data, WPI Data, BEILSTEIN Data, EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 470 794 A (IMPERIAL CHEMICAL INDUSTRIES PLC, UK) 12 February 1992 (1992-02-12) example 3, compounds B, D and E ---	1-9
X	DE 44 07 488 A (BAYER A.-G., GERMANY) 14 September 1995 (1995-09-14) page 18, compound 2E; page 22, compound 2K ---	1-7, 18
X	IMAI, YOSHITANE ET AL: "Novel axial chiral sulfur-oxazoline ligands with a biphenyl backbone" SYNLETT, no. 8, 1999, pages 1319-1321, XP001180763 Schemes 1 and 2; Table 3, compounds 1a, 1b, 2a, 2b, 3a, 3b, 4 ---	1-7, 18
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☒ Further documents are listed in the continuation of box C.

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### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- \*&\* document member of the same patent family

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19 April 2004

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Name and mailing address of the ISA

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# INTERNATIONAL SEARCH REPORT

PCT/EP 12181

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/41 A61K31/18 A61K31/4402 A61K31/4406 A61K31/4409  
A61K31/4418 A61P13/12 A61P19/08 A61P25/28 A61P29/00  
A61P37/00

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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>BAKER, ROBERT W. ET AL: "Formal synthesis of both atropisomers of desertorin C and an example of chirality transfer from a biphenyl axis to a spiro center and its reverse"</p> <p>AUSTRALIAN JOURNAL OF CHEMISTRY , vol. 53, no. 6, 2000, pages 487-506, XP009029051 Schemes 3-5, compounds 25,26,35,43-45,47-50</p> <p style="text-align: center;">--- -/--</p>	1-7,18

☒ Further documents are listed in the continuation of box C.

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\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

PCT/EP 12181

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>RIPPERT, ANDREAS JOHANNES: "New axially chiral bis(dihydrooxazoles) as ligands in stereoselective transition-metal catalysis"</p> <p>HELVETICA CHIMICA ACTA , vol. 81, no. 4, 1998, pages 676-687, XP009029050 scheme 1, structure 4, page 680, ligands 4aa, 4ab, 4ad, 4ae, 4af, 4bb</p> <p>---</p>	1-7,18
X	<p>FUSON, REYNOLD C. ET AL: "Synthesis of 2-iodo-2'-methoxybiphenyl. A new route to.omicron.-terphenyls"</p> <p>JOURNAL OF THE AMERICAN CHEMICAL SOCIETY , vol. 81, 1959, pages 487-490, XP001180394 page 488, compound VII</p> <p>---</p>	1-7,18
X	<p>FUSON, REYNOLD C. ET AL: "Reactions of o-methoxyphenylmagnesium bromide with hindered ketones"</p> <p>JOURNAL OF ORGANIC CHEMISTRY , vol. 27, 1962, pages 1578-1581, XP001180397 page 1579, compounds VII,VIIa</p> <p>---</p>	1-7,18
X	<p>MOORLAG, HENK ET AL: "An asymmetric synthesis of a C2 symmetric tetrasubstituted biaryl: 2,2'-dihydroxy-6,6'-dimethyl-1,1'-biphenyl , a stable chiral system"</p> <p>TETRAHEDRON LETTERS , vol. 34, no. 44, 1993, pages 6993-6996, XP001180759 page 6994, compound 6</p> <p>---</p>	1-7,18
X	<p>MOORLAG, HENK ET AL: "Oxazoline-mediated biaryl coupling reactions. Stereocontrolled synthesis of 2,2',6,6'-tetrasubstituted biphenyls"</p> <p>TETRAHEDRON LETTERS , vol. 34, no. 44, 1993, pages 6989-6992, XP001180398 page 6989, structure 3, table 1, entries 1-10</p> <p>---</p>	1-7,18
X	<p>BAKER, ROBERT W. ET AL: "Chirality transfer from a biphenyl axis to a spiro center and its reverse sequential self-immolation"</p> <p>TETRAHEDRON LETTERS , vol. 40, no. 17, 1999, pages 3475-3478, XP004162313 page 3475, compounds 4,5</p> <p>---</p>	1-7,18

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# INTERNATIONAL SEARCH REPORT

PCT/E 3/12181

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WO 01/19814 A (MERCK FROSST CANADA INC  ;RUEL REJEAN (CA); LABELLE MARC (CA);  LACO) 22 March 2001 (2001-03-22)  cited in the application  claim 1; page 59, lines 2-5; page 60, line  2; pages 28-32, schemes 1-3</p>	1-18

# INTERNATIONAL SEARCH REPORT

EP 03/12181

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
Although claims 11-13 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

PCT/03/12181

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0470794	A	12-02-1992	DE 69106975 D1 EP 0470794 A1 JP 4244080 A ZA 9105786 A	09-03-1995 12-02-1992 01-09-1992 24-02-1993
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